Acute Oncology.... Challenges, lessons and benefits

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Whittington Hospital

Background

• August 2009 Chemotherapy Services in England: Ensuring quality & Safety (NCAG Report)
  – 60% increase in chemotherapy
    • 2004-2007 Peer review chemotherapy services
  – National Confidentiality Enquiry into Patient Outcome & Death
    • 35% care judged as good
    • 49% room for improvement
    • 8% less than good
  – Careful provision of care by a team who communicate well
Key recommendation

• NCAG 2009 stated all trusts with an ED must developed an Acute Oncology Service
  – Management of patients who develop severe complications following chemo or as a consequence of their cancer
  – Management of patients who present as emergencies with previously undiagnosed cancer
• AOS brings together expertise from oncology disciplines, emergency medicine, and general medicine and general surgery

How it came about at Whittington?

• 13 PA’s spent on visiting Oncologists
  – Lung & GI
• April 2009 appointed Consultant Medical Oncologist with interest in GI & Lung April 2009
  – Lead Cancer clinician for the Trust
  – 10 PA contract
• Consultant Medical Oncologist 7yrs at Cancer centre visiting a Cancer unit 2 days a week
  – Developed a clear vision for an approach
  – Had seen life from both sides
    • Impact on patient care
    • Impact on Cancer unit clinicians
    • Impact on my working life
Clear vision for an approach

• Clear on what an Acute Oncology service was
  – Working with those who deliver acute care to our patients
    • Be accessible
    • Share expertise
    • Provide updated protocols
• Very clear on what is was not
  – Oncologists in ED
    • Clerking patients
    • Carrying our interventional procedures
• Understood what the issues were for patients and health care staff alike
  – Able to portray a “better experience”
  – Attended workshops in past where issues for AOS addressed

Passion to share my vision and engage “key stakeholders”

• Set aside first 6 weeks after my appointment to meet all key staff from ED & AAU
• Spent day with Outreach critical care team to understand local landscape and issues
• Ensured I listened to feedback
  – What was currently not good enough
  – What needed fixing
• Stayed flexible around personal views
  – My usual response is to solve
  – Aim to deliver the shortfall
Being clear on what an Acute Oncology Service is?

- A service which ensures that all patients with a known diagnosis of cancer are rapidly recognised when they present as an emergency
  - Appropriate care delivered
- Develop pathways to ensure early oncological involvement in patients who present unwell via ED and are found to have a new diagnosis of cancer
  - Appropriate care delivered

Being clear on what an Acute Oncology Service is not?

- Seeing patients with a past history of a resected cancer and now present with atrial fibrillation
- Seeing patients with a vague history and signs e.g. fatigue and anaemia with no clear clinical or radiological evidence of malignancy
- Acute Oncology should not supersede excellent diagnostic services but play a greater part in further management when malignancy suspected on radiology
What is an Acute Oncology Team?

• Emergency care medical & nursing staff
• Acute Medical on-take medical team
• Oncologist
• Palliative Care
• Clinical Nurse specialists
• Chemotherapy nurses

AOS brings together expertise from oncology disciplines, emergency medicine, and general medicine and general surgery.

Role of Oncologist in AOS

• Sharing expertise in managing Oncological emergencies irrespective of tumour type
  – Sub-specialisation has eroded confidence in generic skills
• Advisory capacity in how best to proceed in patients who present with a new suspected cancer
  – Where case does not fit into recognised established pathways
  – Individualised treatment plans incorporating PS & co-morbidities
Data to understand the usual pathway
King et al BMJ Qual Saf 2011;20:718-724

Process mapping the patient pathway for medical presentations

59% self referral
41% GP referral

A&E
Admit
Radiology report suggests cancer
Delay awaiting procedure
Refer for endoscopy/ biopsy for tissue diagnosis
Cancer confirmed on histology
MDT review imaging And histology
Refer to oncology

Delay awaiting report
9 days
Delay awaiting MDT
1.6 days

34 medical patients presented via ED 2008 and found to have a new cancer diagnosis

Median Los 19 days
Blood tests 42
Number of tests 3
47% referred to palliative care
26% Oncology
60% upper GI/HPB

Relative one year survival: by cancer type
Malignant registrations, South West 2007, excluding multiples and DCOs

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Build easy to use referral systems

• Engage with IM&T
  – To set up referral systems using existing software
    • E.g. order comms Sunquest ICE
  – To set up Rapid alert systems
    • To alert staff when known cancer patients
      – on chemo present to ED
      – With known bone mets present with back pain, weak legs
    • Possible to use in house resources
      – Used ACCESS database with PAS & Business Objects

Build relationships

• Work with Acute Care clinicians & ED
  – Define and agree roles of staff
  – to define admission category
• Discuss with Bed Managers
  – Where to prioritise all admissions if no dedicated oncology ward
  • E.g Dr Leonard responsible for in-patient care if patients admitted to Mercers ward
Inpatient Referral – if a current inpatient needs an urgent review by an Oncologist

Outpatient Referral – Referral for a fast-track outpatient referral
Example of Rapid alert changing management

- 40 yrs male
- Completed neoadjuvant chemo for synchronous sigmoid & liver CRC
- 4 weeks post hepatic resection
- Presented ED with headache over weekend
Case history: 55 yrs Married man
Diagnosed NSCLC Feb 2010
Completed chemo May 2010 good response

- 2.8.2010 presented to ED with increasing SOB
  - AF
  - CT showed increasing pericardial effusion
- ED arrival 21.16hrs
- Triage assessment 00.35hrs
  - 3hrs 19mins
- Admitted under care of Dr Leonard
  - stabilised with help from cardiologist and referred for pericardial window London Heart
- Discharged 4.8.2010
- Alert placed on EDIS on discharge

- 5.8.2010 ED arrival 15.48
- Triage assessment 16.08hrs
- Clinical category same
  - 20mins
- Difference was clinical alert which informed triage nurse of seriousness and who to contact
- 6.8.2010 Transferred to London Heart
Pilot data

In-patient admissions to Mercers Ward

89 pts in 6 months -
- 78/89 = 88% disease related
- 7/89 = 8% treatment related
- 4/89 = 4% "other"

Disease related admissions

- Of the 88% admissions
  - 31% Symptom control
  - 15% Drainage ascites
  - 10% End of Life care
  - 10% Small/Large bowel obstruction
  - 6% Pleural effusion
  - 5% Pneumonia
Other PE/GI Bleed/Haemoptysis/Staging investigations
Other stakeholders?

- Radiologists
  - 35 yr old female
    - 6m history back pain & lethargy
  - GP referred for CT on basis of abnormal CXR
  - Called on day of CT to explain
  - Within 24 hrs mediastinoscopy
  - Within 4 working days diagnosis
  - HD

MR WM 71yrs Non-smoker Hx RUQ pain
06.1.12 GP rang for advice – liver mets on US
10.1.12 Seen by PL Fast track OPA (4/7)

PS 1 Keen for all interventions understood treatment plan and intention
17.1.12 CT results & diagnostic plan (11/7)
18.1.12 EBUS UCLH (12/7)
MDT presentation on 20.1.12 (14/7)
27.1.12 EBUS results & 1st day treatment (21/7)
1.2.12 Lung MDT presentation (26/7)
Compare & contrast
Fast track v Best 2WW

- MR WM 71yrs Non-smoker Hx RUQ pain
- 06.1.12 GP rang for advice – liver mets on US
- 10.1.12 Seen by PL Fast track OPA (4/7)
- PS 1 Keen for all interventions understood treatment plan and intention
- 17.1.12 CT results & diagnostic plan (11/7)
- 18.1.12 EBUS UCLH (12/7)
- 20.1.12 Unknown Primary MDT presentation (21/7)
- 27.1.12 EBUS results & 1st day treatment (21/7)
- 1.2.12 Lung MDT presentation (26/7)

- MR WM 71yrs Non-smoker Hx RUQ pain
- 06.1.12 GP sends 2WW - liver mets on US
- 20.1.12 Seen by Gastro team (14/7)
- PS 1 Keen for all interventions understood treatment plan and intention
- 27.1.12 CT results & discussion at unknown primary MDT (21/7)
- 1.2.12 MDT discussion - outcome refer EBUS UCLH (26/7)
- 8.2.12 EBUS UCLH (33/7)
- 15.2.12 MDT presentation (40/7)
- 21.2.12 PL Onco clinic & 1st day treatment (46/7)

What does our service look like now?

One point of referral for AOT (electronic system)

All referrals triaged daily by Dr Leonard/Dr Mohamed (planning to train AOS CNS to do)

Refer to Palliative Care

Dr Leonard, Dr Mohamed or Connie Doria-Tiburcio to review

Refer to site specific CNS
Fast track OPA slots

- 9  F
- 10 1200 R
- 11  R DUFFY P  DIS C44600  VIA MDT
- 12 1245 R
- 13  R
- 14 1330 X  FAST TRACK ONLY

### Routes to Diagnosis

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<th>Cancer Type</th>
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What could be the benefits of establishing an Acute Oncology service?

- Equipping on-call teams with AOS training & updated protocols can:
  - Door to needle time achieved in FN
  - Referral of appropriate patients for neurosurgical opinion in MSCC
- Rapid alert system to notify AOT of any known patient with cancer who presents to ED may avoid admission
- Timely assessment after admission from experienced Oncologist can ensure the most appropriate in management is undertaken
  - More satisfied patients
  - Reduced length of stay

Cost savings Effects of change
A: length of stay

B: blood tests

C: investigations

D: cost of admission
Translated cost savings

• For all known cancer patients in 4 month pilot
  – Reduced LoS 3.7 x 156 x £170 = £98,124 projects to £294,372 over a year
• For all new diagnosis of cancer in 4 month pilot
  – Reduced LoS 5.0 x 74 x £170 = £62,900 projects to £188,700 over a year
• In 6 months 12pts previously undiagnosed cancer =
  – Reduced LOS/investigations saves £2151 per patient 18 x £2151 x 2 = £77,436

  Translates to a potential saving of £560,508 per year and 2841 bed days!!
  Equals 7.78 (8) beds

Lessons learnt

• Invest time in understanding local needs & demands on service
  – Number of cancer related admissions
  – Number of undiagnosed cancers admitted via ED
  • Different group of patients
  – Number & where to allocate fast track OPA slots
• Not new patients but support current acute care arrangements by
  – Being easily assessable
  – Identify clinicians (medical & nursing) to deliver service
  – Providing updated protocols
• Well understood systems for managing emergencies smooth the fluctuating workload
  – 1-2 extra patients a day on top of usual workload not too onerous
  – Once embedded it becomes the culture – less reliant on AOT as teams able to deliver alone
Challenges

• Clinicians
  – Job plans too busy to incorporate flexibility
  – Territorial
• Lack of engagement
  – Outside comfort zone
• Colleagues
  – Not interested/overwhelmed/sceptical
• Culture
  – Organisational/medicine
• Ignorance

Is this deliverable?

• Yes
  – If strong clinical leadership & engagement to ensure its success
• How
  – Commitment from Senior management to provide
    • IM&T support
    • “sabbatical time” for Clinical lead to engage and roll out
    • Realistic job planning to recognise more flexible working
  – Commitment from all clinicians to provide “rota/cover” & flexible working
Can it be achieved in Wales?

• Yes
• Yes
• Yes

Acknowledgements

• Dr Judy King
• Dr Mulyati Mohamed
• Cathy Parker
• Elizabeth Whitehurst
• Sarah Wilson
• Mrs Celia Ingham-Clark
• Dr Caroline Allum
• Luke Martin
• Robert Pinate
• Dr Richard Jennings
• NLCN - £35,000 service improvement award
Excellence in Oncology Award 2010

Oncology team of the year